

the existence of the core teams for DSL.⁷⁰ the team members were either not canvassed, or in instances where they did,⁷¹ failed to produce responsive documents.⁷²

Furthermore, from depositions that were later obtained from SWBT employees, it became clear that several SBC employees who were most knowledgeable in SBC in responding to certain RFI requests from ACI and Covad, were never contacted to assist in document production, and in many instances, were not even aware of this proceeding.⁷³

Conclusion

SWBT's failure to produce documents on the central, critical issues in these dockets cannot be excused by SWBT's ignorance of its own internal operations. Were the threshold for a showing of good cause lowered to allow excuses such as these, the good cause exception would become the rule, not the exception, thus undermining the purpose behind TEX. R. CIV. PROC. 215. For this reason the good cause exception is a narrow one and should not be enlarged. *Foster* at 807. The mere fact that only general inquiries were made by the SWBT document production staff, which then failed to turn up all responsive documents, is not enough to justify SWBT's lack of diligence in pursuing what should have been a thorough and complete search to locate responsive information. The Arbitrators decline to enlarge good cause to include mere mistakes, and find that SWBT failed to show good cause for its failure to produce documents prior to April 14, 1999.

ACI Exhibit 17A

Factual Summary

The fourth ground for the Petitioners' motion for sanctions concerns whether ACI Exhibit 17 was altered when it was redacted. ACI Exhibit 17 was submitted as a redacted document on April 15, 1999. The Arbitrators ordered that the unredacted version be provided as ACI Exhibit

⁷⁰ *Id.*

⁷¹ Tr. at 1126 (June 3, 1999).

⁷² See Confidential Attachment C, Paragraph 11.

⁷³ See Confidential Attachment C, Paragraphs 12 and 13.

17a. ACI contends that when SWBT provided ACI Exhibit 17, it had unilaterally revised the original unredacted ACI Exhibit 17a. because the redacted version and the unredacted version differ substantively. ACI claims SWBT masked certain data, changed the name, renumbered pages and headnotes, creating the illusion that ACI Exhibit 17a was something different than what was originally submitted in redacted form. Moreover, ACI submits that the changes were made to information that was damaging to SWBT's previous testimony and case. ACI claims SWBT unilaterally revised five pages of information, although the renumbering made it appear that only one or two pages were redacted.

SWBT alleges that any redaction missteps were corrected when the unredacted version was delivered to the parties, curing any mechanical mistakes that were made. SWBT also argues that any mistakes that were made were not material, were harmless, and were acknowledged by SWBT at the hearing on April 16, 1999.⁷⁴

Analysis

ACI alleges that SWBT improperly revised ACI Exhibit 17 when it was redacted from ACI Exhibit 17a. ACI has the burden to prove its allegation beyond mere suspicion. ACI points to irregularities between the two documents. There is evidence by comparing ACI Exhibits 17 and 17a that would indicate that it was revised improperly. In addition, Mr. Samson's testimony of April 16, 1999, explained the incorrect process he undertook in redacting the document. However, Mr. Samson's testimony also provides a reasonable explanation for the method of redaction and the intent behind the changes.

Conclusion

The Arbitrators find that SWBT intentionally revised or altered ACI Exhibit 17. However, the Arbitrators find that SWBT provided a reasonable explanation for the redactions. Therefore, it is clear that the document was not properly redacted, but there is no evidence that SWBT improperly redacted ACI Exhibit 17 with intent to mislead. The Arbitrators find that no sanctionable misconduct was involved.

⁷⁴ Tr. at 706-708 (April 16, 1999).

ACI Exhibit 153

Factual Summary

The final ground for sanctions involves ACI Exhibit 153. In the joint Amended Motion for Sanctions, Petitioners assert that SWBT gave a directive described in Confidential Attachment C, Paragraph 1, as evidenced by ACI Exhibit 153. This action, ACI claims, shows SWBT intended to prevent ACI, the Commission staff, and the Arbitrators from discovering key documents regarding parity provisioning of xDSL capable loops.

Regarding the directive contained in ACI Exhibit 153, SWBT claims that Petitioners offered no evidence that the directive was improper or had any negative impact on discovery in these dockets. SWBT argues that no improper action took place, and makes other arguments shown in Confidential Attachment C, Paragraph 14.

Analysis⁷⁵

While there is no evidence other than ACI Exhibit 153 itself that any action was actually taken in response to the directive contained in ACI Exhibit 153, SWBT presented no evidence that action was not taken by recipients. SWBT has made no showing to ascertain whether the directive was followed. The e-mail was sent, however, and it is possible that it was acted upon, especially since it was sent to dozens of SBC employees. Although the document speaks for itself, there is no additional evidence that the e-mail was intended to defraud the Commission during the discovery process in this proceeding.⁷⁶

Conclusion⁷⁷

ACI Exhibit 153 is clearly dated after the Petitioners in this arbitration propounded the first set of RFIs. The subject matter of the communication relates to the issues in this arbitration. The Arbitrators rule that, while there is no corroborative evidence that SBC employees

⁷⁵ See Confidential Attachment C, Paragraph 16 for confidential analysis on this issue.

⁷⁶ See Confidential Attachment C, Paragraph 15.

⁷⁷ See Confidential Attachment C, Paragraph 17 for confidential conclusions on this issue.

responded to the directive in ACI Exhibit 153, the intent of the communication contained in the exhibit is unsettling. At the very least, the communication sent in ACI Exhibit 153 indicates a general disregard on the part of SBC for matters pending in litigation at the Commission. Therefore, the Arbitrators find that ACI Exhibit 153 provides an additional independent ground for sanctions. The testimony relating to ACI Exhibit 153 supports a finding of discovery abuse against SWBT.⁷⁸

III. SANCTIONS AWARDS

A. DISCUSSION ON SANCTIONS

This proceeding involves highly technical issues related to the provision of competitive advanced services under the FTA. It is essential that the Arbitrators and the Commission know the whole truth about these issues prior to ruling on the merits in the arbitrations. The Arbitrators have found that SWBT abused the discovery process in this proceeding on three separate and independent grounds: (1) by failing to produce requested documents, (2) by failing to provide witnesses who were knowledgeable about SWBT's activities on which they were filing testimony, and (3) by issuing the directive contained in ACI Exhibit 153.

The Arbitrators do not agree with Petitioners that the appropriate remedy for such discovery abuse is to strike SWBT's testimony on all of the DPL issues and adopt Petitioners' recommendations in full. Such an extreme remedy is not appropriate in this instance, where the Arbitrators are not basing the decision a finding of intentional discovery abuse by SWBT. Sanctions must bear direct relationship to offensive conduct, not be excessive and less stringent sanctions should be imposed before imposing "death penalty," or case-determinative sanctions, if it will fully promote compliance, act as a deterrence, and discourage further abuse. *TransAmerican Natural Gas* at 917-918; *Braden v. Downey*, 811 S.W.2d 922, 929 (Tex. 1991). The court has discretion in imposing sanctions, but sanctions must be "just." *Chrysler Corp. v. Blackmon*, 841 S.W.2d 844, 849 (Tex. 1992). Purposes of sanctions are to secure compliance, deter others from similar misconduct, and to punish violators. *CRSS Inc. v. Montanari*, 902 S.W.2d 601, 609 (Tex.App.—Hous. [1st Dist.] 1995) writ denied, citing *Bodnow* at 840.

⁷⁸ See Confidential Attachment C, Paragraph 18, for confidential conclusions.

Whenever possible, lesser sanctions should be imposed. In exceptional cases, case-determinative sanctions may be imposed in the first instance, but only where the sanction is clearly justified and it is fully apparent that no lesser sanction would promote compliance. *GTE Communications Systems v. Tanner*, 856 S.W.2d 725, 729 (Tex. 1993). The record must reflect that the availability of lesser sanctions was considered. *Otis Elevator Co. v. Parmelee*, 850 S.W.2d 179, 181 (Tex. 1993). Lesser sanctions can be an order to compel, threats of dismissal before striking, striking or limiting evidence, penalties, costs, expenses and attorneys' fees, and contempt. TEX. R. CIV. PROC. 215(d) See *Andras v. Memorial Hospital System*, 888 S.W.2d 567, 572 (Tex.App.—Hous. [1st Dist.] 1994) writ denied.

Therefore, the Arbitrators believe lesser, non-case-determinative, but nonetheless firm sanctions against SWBT are appropriate for its abuse of the discovery process in this proceeding. SWBT is ordered to pay all attorneys' fees, costs, and expenses the Petitioners have incurred as a direct result of SWBT's failure to produce the information and documents associated with this hearing. An award of these amounts is a legitimate lesser sanction, directly related to SWBT's failure to answer Petitioners' discovery requests, their failure to provide sufficiently knowledgeable witnesses, and their issuance of the directive in ACI Exhibit 153. The intent of the award is to promote compliance, deterrence, and discourage further abuse of this nature in other interconnection dispute proceedings before this Commission. The schedule for developing the precise amount is included in the following section.

The Arbitrators note Petitioners' requests for redress for economic harm arising from SWBT's abuse of the discovery process and the resultant delay in entering Texas xDSL markets. Petitioners seek payment for lost opportunity costs, including the loss of the "first to market" advantage in the new xDSL market. The Arbitrators acknowledge Petitioners' claims of economic harm; however, the Arbitrators decline to address these claims.

Although not part of the sanctions award, the Arbitrators encourage SWBT to take remedial action to improve its process for communicating "the whole truth" to the Commission.⁷⁹ When discovery is conducted in a case, the parties and the Commission must

⁷⁹ See, e.g., SBC Compliance Plan Regarding FCC Rules and Regulations, Report to SBC Communications, Inc. Regarding Compliance with Provisions of the Telecommunications Act of 1996 Related to

have confidence that the company searched for information and provided as accurate a response as possible on a timely basis. It is not enough for the company to present witnesses and respondents that simply convey the company's official position, without seriously inquiring into the issues involved in order to provide a proper response to the questions posed. The Arbitrators have attempted to mitigate the harm caused by SWBT's abuse of the discovery process in this proceeding. The sanctions contained herein are designed to prevent further abuse in future proceedings.

B. PHASE TWO

Parties are hereby notified of the following schedule for phase two of these proceedings.

Petitioners file direct testimony and documentation regarding expenses resulting from the sanctions proceeding	August 9, 1999
SWBT file reply testimony and documentation regarding expenses resulting from the sanctions proceeding	September 9, 1999
Hearing on Sanction Award	September 23, 1999
Parties file post hearing briefs	September 30, 1999
Parties file reply post hearing briefs	October 7, 1999
Award of expenses issued	October 14, 1999

Copies of all filings should be hand delivered to the Arbitrators.

the Acquisition of Southern New England Telecommunications Corporation (May 3, 1999). A similar educational program for SWBT employees is encouraged here to address issues such as lack of familiarity with official document retention and production policies, proper designation of witnesses, inclusion of pending PUC dockets within the definition of pending litigation, and inclusion of drafts within the definition of documents.

IV. CONCLUSION

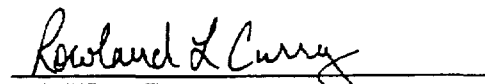
Compliance with Commission rules and applicable state and federal law is not optional in matters of litigation before the Commission. It is in the public interest that the Commission make informed decisions based on complete discovery and whole truths. Through its actions, intentional or not, SWBT has failed to comply with rules of discovery that exist to require parties to bring forward the truth in public proceedings. Parties involved in interconnection disputes before the Commission have the duty to bring forward the whole truth. Therefore, a party before the Commission may not choose to totally ignore Commission rules related to discovery requests.

Pursuant to P.U.C. Proc. R. 22.161(e), any sanction imposed by the presiding officer shall be automatically stayed to allow the party to appeal the imposition of the sanction to the Commission. Accordingly, this Order is stayed to allow SWBT the opportunity to appeal to the Commission.

SIGNED AT AUSTIN, TEXAS the 27th day of July, 1999.

FTA § 252 ARBITRATION PANEL


KATHERINE D. FARROBA
ARBITRATOR


ROWLAND L. CURRY
ARBITRATOR

ATTACHMENT "A"
Revised Decision Point List
May 28, 1999

1. How should a 2-wire xDSL capable loop be defined?
- 2(a). Can a clean copper loop support multiple DSL technologies?
- 2(b). If so, is SWBT required to provide a loop that can support more DSL technologies than ADSL, at the option of the CLEC?
- 2(c). New DPL Issue: Should CLECs provisioning of non standard technologies be obligated to indemnify and hold SWBT harmless for any claims arising due to any harm or degradation to any carrier or customer's service and/or to SWBTs or any third party's network or equipment.
3. Can SWBT be permitted to limit xDSL capable loops to the provision of ADSL?
- 4(a). What is the physical makeup of a DSL capable loop that SWBT is required to provide?
- 4(b). Is SWBT required to provide a copper loop without interfering devices (load coils, bridge taps, and repeaters)?
5. Can DSL loops retain repeaters at the CLEC's option?
6. If a copper loop is not available from the customer premises to the SWBT central office, does ACI have the right to place appropriate equipment such as DSLAMs at the fiber/copper interface point in SWBT's network?
7. Is SWBT permitted to require shielded cable (versus non-shielded cable) for central office wiring when provisioning DSL technologies?
8. Should national standards be applicable to the provisioning of DSL services for the purposes of standards for this Interconnection Agreement, or can SWBT be permitted to impose its unique standards on DSL services via its own technical publication(s)?
9. Can SWBT be permitted to install equipment at its own discretion that may interfere with the provision of DSL services by a CLEC? ..
10. Is it appropriate for SWBT to impose limitations on the transmission speeds of DSL services?
11. From a parity perspective, is SWBT required to conform to the same technical standards as CLECs for competing DSL retail services?
- 12(a). Is there an industry consensus that there is a technically sound basis to implement Binder Group Management Plan?
- 12(b). If not, should a Binder Group Management plan be imposed on CLECs in the interconnection agreement?
- 12(c). Should SWBT be allowed to reserve loop complements for ADSL services exclusively?
13. Should SWBT be required to provide disclosure of the causes for loop nonavailability associated with a BGM program?

ATTACHMENT "A"
Revised Decision Point List
May 28, 1999

14. In the event a technically reasonable BGM process can be developed, can SWBT unilaterally impose its own interference tables or should a neutral third party be empowered to do so?
- 14(a). Should the Interconnection Agreement adopt all the requirements of the March 31, 1999 First Order in CC Docket No 98-147 regarding spectrum compatibility and management?
- 14(b). Should SWBT be required to keep CLEC deployment information confidential from any people involved in SWBT's or any affiliate's retail DSL offerings?
15. Is SWBT required to provide real time access to OSS for loop makeup information qualification, preordering, provisioning, repair/maintenance and billing?
- 15(a). What is the appropriate interval for SWBT's xDSL-capable loop qualification process?
16. Upon request from ACI, is SWBT required to provide loop length and makeup data regarding specific central offices within a reasonable period of time from all central offices?
17. What data should be included in the makeup data?
18. Can SWBT impose a loop qualification process rather than provide information concerning loop makeup?
- 19(a). Should SWBT be required to deploy a mechanized loop makeup information process for DSL capable loops?
- 19(b). Until SWBT deploys the mechanized loop makeup information process, what should the process be for a manual process?
- 20(a). Should the CLEC be allowed to make the business decision as to the need for loop conditioning based on information provided by SWBT?
- 20(b). Should SWBT be allowed to make all determinations regarding loop conditioning for CLEC needs within its sole discretion?
21. Should SWBT be permitted to limit availability to loops over 17.5k ft only on a ICB basis?
22. What is the appropriate provisioning interval for 2-Wire xDSL capable loops?
23. Should all performance measures and penalties adopted in SWBT's §271 proceeding be incorporated into the Interconnection Agreement?
24. Should ACI be permitted to incorporate into the interconnection agreement the results, agreements and decisions reached in the §271 proceeding?
25. Should ACI be entitled to "pick and choose" on a piecemeal basis rates and conditions from other, already approved, interconnection contracts?

Cost Studies and Rates

ATTACHMENT "A"
Revised Decision Point List
May 28, 1999

26. Should rates associated with xDSL capable loops be TELRIC-based?
27. What are the appropriate TELRIC-based xDSL rates?
- 28(a). Is it appropriate to charge a rate for shielded cross connect that is higher than the rate for unshielded cross connect?
- 28(b). If so, what are the appropriate rates for DSL Shielded Cross Connect to Collocation?
29. Should SWBT be allowed to charge additional ADSL "Conditioning" charges?
30. Should SWBT be allowed to charge for a Loop Qualification Process?
31. Is it appropriate to charge for loop makeup information?
32. If SWBT is permitted to require shielded cable for DSL technologies, is there any additional cost associated with shielded intraoffice versus non-shielded cable?
33. Should SWBT be required to offer cageless collocation?
- 33(a). Should SWBT be required to provide collocation at a remote terminal site?
- 33(b). Should the interconnection agreement include new collocation provisions that reflect the requirements of the FCC's March 31, 1999 First Order in CC Docket No. 97-147?
34. What is the appropriate provisioning interval for cageless collocation?
35. How should cageless collocation be priced?
36. Should SWBT be required to permit collocation of ATM cross-connect equipment?
37. Given that xDSL is a newly developing service, should SWBT be required to give to ACI analogous preferential rates adopted after this proceeding?
38. Should the interconnection agreement continue to require dispute resolution before the Commission in light of the Supreme Court's recent decision in *Iowa Utilities Board v. AT&T Corp.*?
39. Should agreed-to commercial arbitrations alternate between SWBT's home and Covad's?

DOCKET NO. 20226

PETITION OF RHYTHMS LINKS, INC.	§	
FOR ARBITRATION TO ESTABLISH AN	§	PUBLIC UTILITY COMMISSION
INTERCONNECTION AGREEMENT	§	
WITH SOUTHWESTERN BELL	§	OF TEXAS
TELEPHONE COMPANY	§	

DOCKET NO. 20272

PETITION OF DIECA	§	
COMMUNICATIONS, INC., d/b/a COVAD	§	PUBLIC UTILITY COMMISSION
COMMUNICATIONS COMPANY FOR	§	
ARBITRATION OF INTERCONNECTION	§	OF TEXAS
RATES, TERMS, CONDITIONS AND	§	
RELATED ARRANGEMENTS WITH	§	
SOUTHWESTERN BELL TELEPHONE	§	
COMPANY	§	

ARBITRATION AWARD

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Attachment A:	DPL Issue Cross-Reference Sheet
Attachment B:	Confidential References in Award (CONFIDENTIAL)
Attachment C:	Revised Shielded Cross Connect Cost Study (CONFIDENTIAL)
Attachment D:	Revised Conditioning Cost Study for xDSL Loops greater than 12,000 feet but less than 18,000 Feet in Length (CONFIDENTIAL)
Attachment E:	Revised Conditioning Cost Study for xDSL Loops at or in Excess of 18,000 Feet in Length (CONFIDENTIAL)

I. SUMMARY OF PROCEEDINGS

On December 11, 1998, and December 21, 1998, Accelerated Communications, Inc. (Rhythms)¹ and DIECA Communications, Inc. d/b/a Covad Communications Company (Covad), respectively (collectively referred to as Petitioners), filed petitions² to establish interconnection agreements with Southwestern Bell Telephone Company (SWBT) pursuant to section 252(b) of the federal Telecommunications Act of 1996 (FTA).³ In order to reduce administrative burdens, the two petitions were consolidated under FTA § 252(g). The hearing on the merits convened on April 14, 1999, and continued through April 16, 1999, at which time the Arbitrators recessed the hearing for six weeks to allow the Parties time to conduct further discovery after it was determined that SWBT had not fully responded to Petitioners' discovery requests.

Following the Arbitrators' decision to extend the discovery period, Petitioners requested an interim order requiring interconnection to prevent any delay in Petitioners' entry into the Texas xDSL market.⁴ The Arbitrators issued an interim order,⁵ which was subsequently appealed by SWBT.⁶ At the May 20, 1999 open meeting, the Commission encouraged the Parties to come to a timely agreement in order to implement the interim order. SWBT and Petitioners implemented interim interconnection agreements on June 2, 1999.

¹ Accelerated Communications, Inc. (ACI) has since changed its name to Rhythms Links, Inc. (Rhythms), Letter to All Parties Re: Notice of Name Change to Rhythms Links (April 30, 1999); Order No. 24, Recognizing Name Change (Oct. 8, 1999). Throughout this Award, ACI will be referred to as Rhythms. References to pleadings shall reflect the actual name of the Party at the time they were filed.

² Petition of Accelerated Communications, Inc. for Arbitration to Establish an Interconnection Agreement with Southwestern Bell Telephone Company, Docket No. 20226 (Dec. 11, 1998); Petition of DIECA Communications, Inc., d/b/a Covad Communications Company for Arbitration of Interconnection Rates, Terms, Conditions and Related Arrangements with Southwestern Bell Telephone Company, Docket No. 20272 (Dec. 21, 1998).

³ Telecommunications Act of 1996, Pub. L. No. 104-104, 110 Stat. 56, codified at 47 U.S.C. §§ 151 et seq. (FTA).

⁴ ACI's Letter to Judges Farroba and Curry Regarding an Interim Order (April 16, 1999); List of Interim Steps the Commission Should Require SWBT to Implement to Prevent the Delay in the Arbitration from Further Delaying Covad's Ability to Bring Competitive DSL Services to Texas (April 21, 1999).

⁵ Order No. 5, Interim Order (April 26, 1999).

⁶ SWBT's Appeal of Order No. 5 Interim Order (May 11, 1999).

Following the six-week recess, the hearing on the merits reconvened on June 2, 1999, continuing until completed on June 5, 1999.

This arbitration proceeding has been conducted in accordance with P.U.C. PROC. R. 22.301 - 22.310. The scope of the issues addressed in this arbitration proceeding is limited to the decision point list (DPL)⁷ developed by the Parties.

Ruling on Disputed Issues

The issues in the final DPL are grouped into the following six areas: (1) policy, terms and conditions; (2) spectrum management; (3) provisioning; (4) collocation; (5) costs, rates and prices; and (6) miscellaneous. In this Award, each DPL issue is restated, along with a brief summary of the Parties' positions, followed by the Arbitrators' ruling. As required by P.U.C. PROC. R. 22.305(s), an explanation of the Arbitrators' rationale for each of the rulings is provided.

The Arbitrators find that the following decisions and rates, terms and conditions imposed on the Parties by this Award meet the requirements of FTA § 251 and P.U.C. PROC. R. 22.301-22.310 and any applicable regulation prescribed by the Federal Communications Commission (FCC) pursuant to FTA § 251. This Award establishes terms and conditions, including rates, for interconnection, services, and network elements according to the standards set forth in FTA § 252(d). A schedule for implementation of the rates, terms and conditions of this Award is set forth in Section VIII.

⁷ Revised Decision Point Matrix (DPL) (May 28, 1999).

I. Policy, Terms and Conditions

DPL Issue Nos. 1-7, 9-10

1. How should a 2-wire xDSL capable loop be defined?

Parties' Positions

Rhythms asserts that SWBT must be ordered to provide a single type of "clean copper" xDSL UNE loop, on which Rhythms can deploy any xDSL technology permitted by the *Advanced Services Order*⁸ and/or any order of this Commission.⁹ Rhythms' proposed DSL-capable loop is described as follows:¹⁰

- The loop should be a clean copper loop, with no load coils and a minimum of bridge taps of up to 2,500 feet;
- The loop may contain repeaters at Rhythms' option;
- For DSL services other than IDSL, the loop cannot be part of a digital loop carrier system ("DLC");
- The loop cannot have Digital Added Main Line ("DAML") technology;
- The loop cannot be "categorized" based on loop length in an attempt to impose an artificial restriction on service placed over the loop and artificial limitations cannot be placed on the length of DSL-capable UNE loops;
- The loop should be provisioned to meet basic metallic and electrical characteristics such as electrical conductivity and capacitive and resistance balance; and
- If SWBT is allowed to place limitations on the loop type and xDSL services, it must comply with existing or future national standards as articulated by the American National Standards Institute ("ANSI"), or other national forum, and SWBT cannot restrict Rhythms' use of the loop within these standards.

Rhythms' proposed definition of a 2-wire xDSL Capable Loop is:

⁸ *In the Matter of Deployment of Wireline Services Offering Advanced Telecommunications Capability*, CC Docket No. 98-147, First Report and Order and Further Notice of Proposed Rulemaking, FCC 98-48, (rel. Mar. 31, 1999) (*Advanced Services Order*).

⁹ ACI Exhibit 1, Direct Testimony of Eric H. Geis at 14-18 (Feb. 19, 1999).

¹⁰ *Id.* at 1718; ACI's Post-Hearing Brief at 17-26 (Aug. 17, 1999).

A "2-wire xDSL Capable Loop" for purposes of this Section is a loop from a customer premises to a SWBT Central Office, provisioned using copper facilities from the customer premises to the SWBT Central Office. The loop will have no load coils, and minimal bridge tap up to 2,500 feet. The loop may contain repeaters at [Rhythms'] option. If a portion of the loop must be provisioned using fiber optic facilities due to the exhaustion of copper facilities, even after regrooming, [Rhythms] shall have the right to place appropriate equipment, such as digital subscriber line access multiplexing equipment, at the fiber/copper interface point in SWBT's loop plant. The Parties acknowledge that [Rhythms] may use a variety of xDSL technologies to provision services using a 2-wire xDSL-Capable Loop.¹¹

According to Rhythms, this "one size fits all" clean copper loop will promote innovation and customer choice.¹² Rhythms objects to SWBT's proposed seven different xDSL-Capable loop offerings. Rhythms argues that SWBT's proposed language violates the *Advanced Services Order* because a single loop type for xDSL services is technically feasible.¹³

In addition to the disagreement regarding the provision of "one size fits all" xDSL loops, Rhythms opposes SWBT's inclusion of language regarding spectrum compatibility and management in the definition of the 2-Wire xDSL-Capable Loop.¹⁴ Rhythms further argues that SWBT should be required to perform a "line and station transfer" in the event that a potential Rhythms customer is served on a loop that contains fiber optic facilities (DLC or DAML), in order to allow another copper pair, if available, to extend directly to the customer.

Covad's proposed definition is:

A 2-wire xDSL capable loop (xDSL Loop) for purposes of this Section, is a loop which supports the transmission of Digital Subscriber Line (DSL) technologies. The loop is a transmission path from a customer premises to a SWBT Central office where a CLEC has located appropriate associated equipment, including a cross connect cable from the Main Distributing Frame (MDF) to the associated equipment point of termination. The loop is an upgrade to the Basic Link having

¹¹ First Amended Petition of ACI, Attachment 6 (Jan. 22, 1999).

¹² ACI's Post-Hearing Brief at 22 (Aug. 17, 1999).

¹³ *Id.* at 24 (Aug. 17, 1999); ACI Exhibit 9, Rebuttal Testimony of Mike Kersh at 6-7 (April 8, 1999).

¹⁴ ACI Exhibit 1, Direct Testimony of Eric H. Geis at 28-32 (Feb. 19, 1999); ACI Exhibit 3, Direct Testimony of Rand Kennedy at 20 (Feb. 19, 1999). Spectrum management and compatibility issues are discussed in Section III of this Award.

no mid-span repeaters or other electronics and no greater loss than 38dB end-to-end measured at 40,000 Hz with 135 ohms at the central office POI and 135 ohms at the MPOE. This loop will not have any load coils or bridged taps within limits defined by the specification applicable to ISDN loops.¹⁵

Covad contends that in order to provision most of its xDSL services, including ADSL and SDSL, it “merely needs a clean copper loop that is not too long.”¹⁶ Currently, Covad requires loops that are less than 15,000 feet in length, unless providing IDSL, for which Covad can provision service over loops up to 40,000 feet in length.¹⁷

SWBT’s amended proposed definition is:

The term digital subscriber line (“DSL”) describes various technologies and services. The “x” in xDSL is a place holder for the various types of DSL services, such as ADSL (asymmetric digital subscriber line), HDSL (high-speed digital subscriber line), UDSL (universal digital subscriber line), VDSL (very high-speed digital subscriber line), and RADSL (rate-adaptive digital subscriber line). The provision of DSL services is subject to a variety of important technical constraints, including subscriber loop length and the quality of the loop, which must be free of excessive bridged taps, loading coils, and other devices commonly used to aid in the provision of analog voice and data transmission, but which interfere with the provision of DSL services. In addition, clear spectral compatibility standards and spectrum management rules and practices are necessary both to foster competitive deployment of innovative technologies and to ensure the quality and reliability of the public telephone network. The Parties will comply with the FCC’s rules on spectrum compatibility and management that enable the reasonable and safe deployment of advanced services prior to the development of industry standards.¹⁸

At the time the initial request for arbitration was filed, SWBT proposed a definition that Petitioners interpreted to limit them to the provision of only ADSL service over xDSL loops. On March 30, 1999, SWBT amended its proposed contract language, explaining that the xDSL loop

¹⁵ First Amended Petition of Covad, Proposed Contract Language (Jan. 20, 1999).

¹⁶ Covad Exhibit 4, Direct Testimony of Anjali Joshi at 5 (Feb. 19, 1999).

¹⁷ *Id.* at 6.

¹⁸ SWBT Exhibit 6, Rebuttal Testimony of Michael C. Auinbauh, Schedule 2, Section I (March 30, 1999).

offering was being expanded to allow competitive local exchange carriers (CLECs) to deliver a variety of high-speed data access options over SWBT's network.¹⁹

In addition to the basic proposed definition above, SWBT's revised contract language proposal contains seven different xDSL-Capable loop offerings, as follows:²⁰

- A. xDSL-Capable Loops used with xDSL Technology which complies with Existing Industry Standards.
 - 1. 2-Wire ADSL-Capable loop
 - 2. 2-Wire Very Low-band Symmetric Technology Capable Loop
 - 3. 2-Wire Mid-band Symmetric Technology Capable Loop
 - 4. 4-Wire Mid-band Symmetric Technology Capable Loop
 - 5. Other Industry Standard DSL-capable loops
- B. Non-Standard DSL-Capable Loops.
 - 1. Approved or successfully deployed non-standard xDSL technologies
 - 2. Other Non-standard xDSL technologies

SWBT maintains that it must define these seven loop types in order to allow CLECs to efficiently obtain loops for chosen xDSL services while still allowing SWBT to meet its obligations to inventory and manage the network. SWBT opposes any attempt by a CLEC to obtain a universal xDSL "clean copper loop," asserting that such requests are simplistic and erroneous.²¹ According to SWBT witness Mr. Deere, SWBT does not agree with Rhythms' definition of a clean copper loop, since SWBT believes "that the interference is a major component of providing a loop that is capable of providing services."²²

SWBT disagrees with Petitioners' proposed loop definitions that allow Petitioners to place digital subscriber line access multiplexing (DSLAM) equipment outside of the central office, at the fiber/copper interface point. SWBT indicates that ADSL loops may be available out of remote terminal (RT) sites, but that SWBT will have to work with CLECs to identify

¹⁹ *Id.* at 7.

²⁰ *Id.* at Schedule 2, Section II-A and II-B.

²¹ SWBT Exhibit 5, Direct Testimony of V. Allen Samson at 5 (Feb. 19, 1999).

²² Tr. at 72 (April 14, 1999).

crosstalk and interference issues associated with RTs.²³ This issue is further addressed in DPL Issue No. 6.

Award

To evaluate the definition of an xDSL-capable loop, the Arbitrators begin with the definition of a local loop UNE. In the 1996 *Local Competition First Report and Order*,²⁴ the FCC concluded that “the local loop element should be defined as a transmission facility between a distribution frame, or its equivalent, in an incumbent LEC central office, and the network interface device at the customer premises.” The FCC further found that this definition “includes, for example, two-wire and four-wire analog voice-grade loops, and two-wire and four-wire loops that are conditioned to transmit the digital signals needed to provide services such as ISDN, ADSL, HDSL, and DS1-level signals.”²⁵

In ¶¶ 383 and 384 of the *Local Competition First Report and Order*, the FCC further found that it is technically feasible to unbundle IDLC-delivered loops. The FCC stated:

. . . incumbent LECs must provide competitors with access to unbundled loop types regardless of whether the incumbent LEC uses integrated digital loop carrier technology, or similar remote concentration devices, for the particular loop sought by the competitor. . . . If we did not require incumbent LECs to unbundle IDLC-delivered loops, end users served by such technologies would not have the same choice of competing providers as end users served by other loop types. Further, such an exception would encourage incumbent LECs to “hide” loops from competitors through the use of IDLC technology.

In its recent *UNE Remand Order*,²⁶ the FCC described DSL-capable loops as “loops capable of providing high-speed data services,” “basic loops stripped of accreted devices, i.e.,

²³ SWBT Exhibit 2, Direct Testimony of William C. Deere at 21 (Feb. 19, 1999); SWBT Exhibit 7, Rebuttal Testimony of William C. Deere at 18 (April 8, 1999).

²⁴ *Implementation of the Local Competition Provisions of the Telecommunications Act of 1996*, CC Docket No. 96-98, First Report and Order, FCC 96-325 (rel. Aug. 8, 1996) (*Local Competition First Report and Order*).

²⁵ *Local Competition First Report and Order* at ¶ 380.

²⁶ *Implementation of the Local Competition Provisions of the Telecommunications Act of 1996*, CC Docket No. 96-98, Third Report and Order and Fourth Further Notice of Proposed Rulemaking, FCC 99-238 (rel. Nov. 5, 1999) (*UNE Remand Order*).

'conditioned' loops," "unencumbered copper wire," and "basic loops, with their full capacity preserved."²⁷

The Arbitrators find that SWBT should not be allowed to limit the capabilities of xDSL services on an xDSL loop through unnecessarily complex definitions and restrictions. FTA § 706 requires the FCC and state commissions to "encourage the deployment on a reasonable and timely basis of advanced telecommunications capability to all Americans ... by utilizing, in a manner consistent with the public interest, ... measures that promote competition in the local telecommunications market ... "²⁸ The competitive provisioning of xDSL services appears consistent with Congressional intent regarding innovation of advanced services. Arbitrary restrictions or restrictions unilaterally imposed by an ILEC should not be placed on the type of services that may be provisioned using copper loops. However, the Arbitrators find that the technologies deployed on copper loops must be in compliance with relevant national industry standards and/or requirements established during this Commission's § 271 proceeding, e.g., standards set by the § 271 DSL Working Group.²⁹

The Arbitrators find that SWBT provided no compelling evidence for its categorization of loop types, other than the distinction between 2-wire and 4-wire loops, which is not a disputed issue. SWBT bases its categorization on spectrum management issues, but provides no clear rebuttal to proposals that many types of xDSL technology can be placed on precisely the same "clean" copper pair. The Arbitrators do not believe that SWBT has demonstrated that Rhythms' "one size fits all" concept will not work, and find that a single xDSL capable UNE loop type is technically feasible, and is efficient both timewise and economically. The Arbitrators find that SWBT must offer a "2-wire xDSL loop" and a "4-wire xDSL loop" and cannot require the use of multiple xDSL-Capable loop offerings like the seven it proposed in these proceedings. In

²⁷ UNE Remand Order at ¶ 190.

²⁸ FTA § 706(a).

²⁹ See Project No. 16251, *Investigation of Southwestern Bell Telephone Company's Entry Into The Texas InterLATA Telecommunications Market*, Order No. 53, Approving Addition of DSL Attachment and Changes to Texas 271 Agreement (Sept. 22, 1999) ("T2A"). The § 271 DSL Working Group is referenced in Section 8.4 of Attachment 25 of the T2A. See also Project No. 16251, *Memorandum of Understanding*, filed by SWBT (Apr. 26, 1999) ("MOU").

addition, the Arbitrators find that the xDSL loop cannot be “categorized” based on loop length and limitations cannot be placed on the length of xDSL loops available to CLECs.

The Arbitrators find no reason to burden the definition of a “2-wire xDSL loop” with the complexities of spectrum compatibility and management. Nor should the definition of a “2-wire xDSL loop” include specifics regarding the issue of provisioning when fiber optic facilities are present, *e.g.*, remote placement of DSLAM equipment, “line and station transfers,” sub-loop unbundling. Those issues are addressed separately in this Award, and the Parties should incorporate separately ~~agreement language on those issues.~~

The Arbitrators, therefore, find that the definition of a “2-wire xDSL loop” shall be as follows:

A 2-wire xDSL loop (xDSL Loop) for purposes of this section, is a loop that supports the transmission of Digital Subscriber Line (DSL) technologies. The loop is a dedicated transmission facility between a distribution frame, or its equivalent, in a SWBT central office and the network interface device at the customer premises. A copper loop used for such purposes will meet basic electrical standards such as metallic conductivity and capacitive and resistive balance, and will not include load coils or excessive bridged tap.³⁰ The loop may contain repeaters at [CLEC’s] option. The loop cannot be “categorized” based on loop length and limitations cannot be placed on the length of xDSL loops. A portion of an xDSL loop may be provisioned using fiber optic facilities and necessary electronics to provide service in certain situations.

2(a). Can a clean copper loop support multiple xDSL technologies?

Parties’ Positions

Rhythms contends that a clean copper loop can support many types of xDSL services, including ADSL, RADSL, SDSL, and HDSL technologies, and that IDSL can be deployed on copper or copper/fiber loop plant configurations.³¹ Rhythms argues that there is no need for SWBT’s elaborate binder group management (BGM) process, since xDSL technologies are

³⁰ Excessive bridged tap is defined as bridged tap in excess of 2,500 feet in length.

³¹ ACI Exhibit 3, Direct Testimony of Rand Kennedy at 10-11 (Feb. 19, 1999).

designed to coexist with one another.³² Rhythms contends that this has been proven in multiple jurisdictions, including California, Illinois, Massachusetts, and New York. Furthermore, Rhythms adds that deployment is imminent in New Jersey, Pennsylvania, Maryland, Virginia, and the District of Columbia.³³

Rhythms insists that it does not seek a guarantee that the service it chooses to connect to the clean copper loop will work in all cases, or that it will be able to achieve a particular transmission rate. Rhythms seeks only a guarantee that the loop provided will be free of shorts, opens, or grounds, and that it will have acceptable ~~metallic and electrical~~ characteristics, including electrical conductivity and capacitive and resistive balance.³⁴

Covad declares that it needs clean copper loops to deploy ADSL, SDSL, and IDSL in Texas.³⁵ Covad indicates that it is currently providing SDSL, IDSL, and ADSL services in Washington, California, New York, Massachusetts, Virginia, Maryland, Pennsylvania, New Jersey, Illinois, Michigan, and Washington, D.C.³⁶

SWBT asserts that a "clean copper loop" is not a standard design facility in a traditional telephone network.³⁷ SWBT indicates that loops exist in a binder group within a cable, and while some binder groups could support one xDSL technology alongside other services, a different xDSL technology on the same pair in that same binder group may not be supportable. SWBT claims that the issue goes beyond the theoretical "clean copper loop" but exists in a real world where multiple service providers share limited resources. Effective use of those resources, according to SWBT witness Mr. Deere, requires identification of the types of technologies

³² ACI Exhibit 4, Direct Testimony of Philip Kyees at 7 (Feb. 19, 1999); ACI Exhibit 8, Rebuttal Testimony of Rand Kennedy at 6 (April 8, 1999).

³³ ACI Exhibit 1, Direct Testimony of Eric H. Geis at 12 (Feb. 19, 1999).

³⁴ ACI Exhibit 8, Rebuttal Testimony of Rand Kennedy at 8-9 (April 8, 1999); ACI Exhibit 4, Direct Testimony of Philip Kyees at 6 (Feb. 19, 1999).

³⁵ Covad Exhibit 4, Direct Testimony of Anjali Joshi at 5 (Feb. 19, 1999).

³⁶ Covad Exhibit 1, Direct Testimony of Charles A. Haas at 9 (Feb. 19, 1999); Tr. at 1169 (June 4, 1999).

³⁷ SWBT Exhibit 5, Direct Testimony of V. Allen Samson at 5 (Feb. 19, 1999).

supportable, the effect of those technologies, and then management of the outside plant to maximize service availability. It is SWBT's position that copper loops can be conditioned and managed to support multiple technologies only if those technologies are defined, inventoried separately, and managed according to appropriate spectrum guidelines.³⁸ SWBT therefore proposes that Petitioners be required to order from seven different xDSL loop types as defined by SWBT.

Award

The Arbitrators are not persuaded by SWBT's argument that various types of xDSL services cannot work on the same basic copper loop. SWBT's argument focuses instead on the categorization of services provided on these loops in order to manage spectrum and conditioning. Further, SWBT's categorization proposal is inefficient and unnecessary, and could lead to delays in and barriers to CLEC deployment of xDSL. Requiring Petitioners to order from seven different loop types as determined by SWBT has the potential to cause delay in the wholesale ordering and provisioning process.

The Arbitrators are concerned that SWBT has shown a clear tendency to oppose provision of multiple xDSL technologies provided by CLECs on SWBT's unbundled facilities. As an example, the following communication took place between SBC employees on March 16, 1998:

Message from C. Yackle to M. Russell, J. Thurwalker (Mar. 16, 1998, 10:58 a.m.): Mark – Once again we may need some guidelines. We can't manage a million different technologies. We must unbundle what we offer not everything that anyone can think up. Today we use ISDN, HDSL and ADSL. We need guidelines for these. Jim – Can we maintain a position that we don't provide unbundled loops for technologies that we do not use?

Response from J. Thurwalker (March 16, 1998, 1:03 p.m.): Cliff – Generally speaking, we've successfully defended our position of not providing unbundled loops for services which we did not provide under the argument that the technology issues have not been addressed, and as such we don't know what it will do to our network fabric.

³⁸ SWBT Exhibit 2, Direct Testimony of William C. Deere at 18 (Feb. 19, 1999).

Response from C. Yackle (March 16, 1998, 1:07 p.m.): I suspect that we should begin to seriously consider how we are going to react as different CLECs want to utilize different technologies in our cable plant. I know that we are all fixing to get very busy but a consistent well thought out approach could avoid another problem like we face with Covad and others in California.³⁹

Another example of SWBT's desire to limit CLEC services can be found in the July 21, 1998 minutes of the Network Evolution for Data Services (NERDS) committee. See Confidential Attachment B, Paragraph A.

Petitioners have demonstrated that clean copper loops are currently supporting multiple xDSL technologies in other jurisdictions.⁴⁰ Further, the FCC provides direction on this issue when describing methods to foster competitive deployment of innovative technologies for advanced services.⁴¹ The evidence in this proceeding indicates that a clean copper loop (without load coils, excessive bridged tap, and within a specific design length) can support multiple xDSL technologies. The language adopted in the award for DPL Issue No. 1 is sufficient for the provision of xDSL services without SWBT's proposed categorizations.

2(b). If so, is SWBT required to provide a loop that can support more DSL technologies than ADSL, at the option of the CLEC?

Parties' Positions

Rhythms asserts that there is no technical basis on which SWBT can legitimately restrict Rhythms' use of a loop as SWBT has proposed, so long as Rhythms' deployment of xDSL technology complies with relevant national standards.⁴² Rhythms states that SWBT's proposal to submit new xDSL products to a third-party laboratory for testing would serve only to delay introduction of new technologies and services.⁴³

³⁹ Covad Exhibit 52.

⁴⁰ ACI Exhibit 1, Direct Testimony of Eric H. Geis at 12 (Feb. 19, 1999); Covad Exhibit 1, Direct Testimony of Charles A. Haas at 9 (Feb. 19, 1999); Tr. at 1169 (June 4, 1999).

⁴¹ *Advanced Services Order* at ¶ 63.

⁴² ACI Exhibit 3, Direct Testimony of Rand Kennedy at 20 (Feb. 19, 1999).

⁴³ ACI Exhibit 6, Rebuttal Testimony of Eric H. Geis at 12 (Apr. 8, 1999).